

REDUCING POVERTY AND HUNGER IN ASIA

Asia's Poorest and Hungry: Trends and Characteristics

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FOCUS 15 • BRIEF 3 OF 15 • MARCH 2008

Although Asia has made remarkable progress in poverty reduction in the past decade, millions of people across the continent are still solely preoccupied with survival, and hunger is a reality in their everyday life. Today, around 600 million people in Asia subsist on less than \$1 a day and many live well below that: 240 million in the region live on less than 75 cents a day. The most unfortunate consequence of widespread poverty is that more than 520 million people cannot afford an adequate diet.

Where do Asia's poorest and hungry live, and who among them will be likely to move out of poverty and hunger and who will remain left behind? This brief addresses these questions so as to better understand the characteristics of Asia's poorest and hungry and assess the progress in reducing poverty among the poorest of the poor.

ASIA'S POOREST

Asia has enjoyed substantial reductions in poverty rates since 1990. In 1990, 33 percent of the population—nearly one billion people—lived on less than \$1 a day (the World Bank defines the extreme poor as those living on less than \$1.08 international dollars per person, per day, measured at the 1993 purchasing power parity exchange rates for consumption.) In 2004, less than 18 percent lived on a \$1 a day, representing a reduction of 323 million people.

Not only did the number of poor people fall during this 14-year period, but the regional composition of Asia's poor also changed dramatically (see Figure 1). In 1990, about half of Asia's poor lived in South Asia, and 40 percent lived in East Asia. Today, almost three-quarters of the continent's poor live in South Asia and only 21 percent live in East Asia. The difference in trends in the number of poor between the East and the Pacific (East Asia and Southeast Asia

combined) and South Asia is remarkable. While both regions had about the same number of poor in 1990, East Asia and the Pacific had 277 million fewer people in poverty in 2004 than did South Asia. In Middle and Central Asia, the share of the region's poor more than tripled, from 0.3 percent in 1990 to 1 percent in 2004.

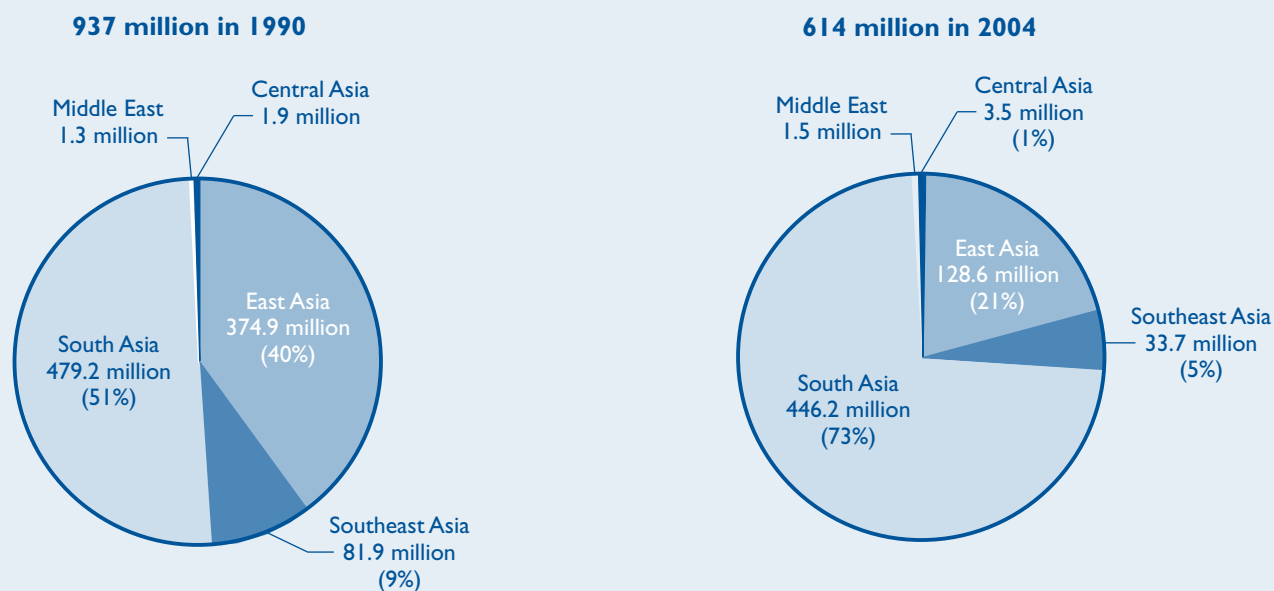
In many countries in Asia, those living below \$1 a day are already the poorest of the poor. However, in some countries large portions of the population live below \$1 a day (for example, 34 percent of the population in India), and so the poorest of the poor are those who live well below the dollar-a-day line. It is of some concern that those who have benefited the most from increases in the region's growth are those who are closest to the poverty line. What, then, can be said about the poorest of the poor and about changes in the welfare of those who live well below the poverty line?

This question can be answered by disaggregating those living on less than \$1 a day into three groups according to their location below the dollar-a-day poverty line (note that, although the poverty gap ratio and the distribution-sensitive squared poverty gap ratio could be used to measure the depth and the severity of poverty, respectively, the head-count measure of poverty was used here because its interpretation is straightforward):

- Subjacent poor: those living on between \$0.75 and \$1 a day
- Medial poor: those living on between \$0.50 and \$0.75 a day
- Ultra poor: those living on less than \$0.50 a day.

Disaggregating dollar-a-day poverty into these groups provides a simple way of looking below the dollar-a-day line to see where people in each group live and how each group has fared over time. Of the 614 million people living on less than \$1 a day in 2004 in

Figure 1—Dollar-a-Day Poverty in Asia, 1990 and 2004

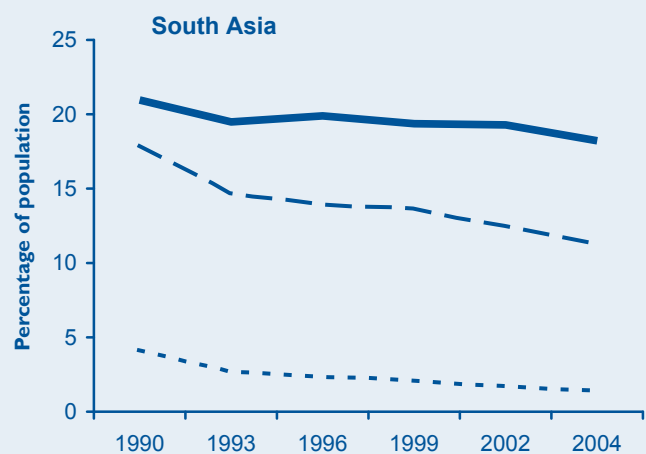
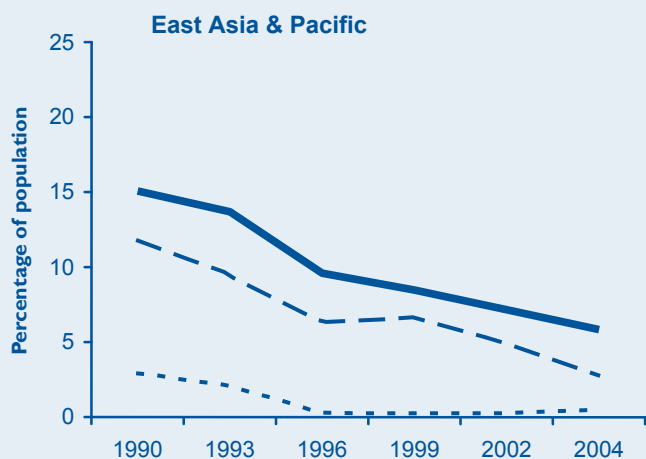
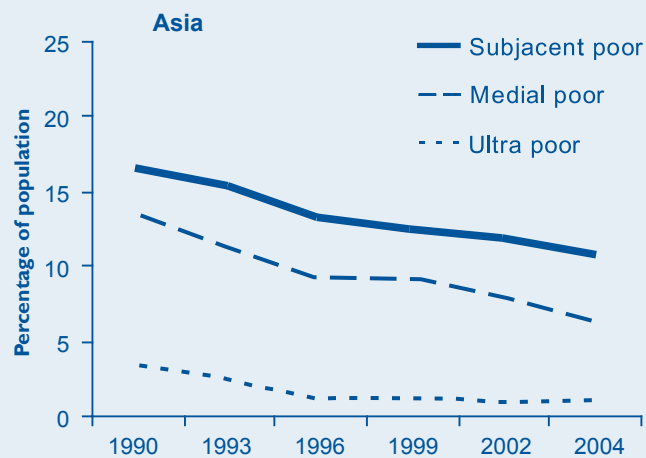


Source: Devised by authors using data from the World Bank's PovcalNet <<http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>>.

Asia, 61 percent were subadjacent poor, 35 percent were medial poor, and 5 percent were ultra poor. At each level of poverty, South Asia accounts for the highest share of the region's poor (between 70 and 77 percent). Figure 2 shows the trends in each of these groups over time for Asia, East Asia and the Pacific, and South Asia.

While panel data are needed to confirm whether those in ultra poverty have fared better or worse than those closer to the line, it is

Figure 2—Trends in Subadjacent, Medial, and Ultra Poverty Rates, 1990–2004



Source: Devised by authors using data from the World Bank's PovcalNet <<http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>>.

possible to get an indication from national poverty data by calculating the amount that subadjacent, medial, and ultra poverty would have decreased if poverty reduction had come from everyone's income growing by the same amount (with the underlying income distribution remaining unchanged). This "equal-growth scenario" poverty reduction is then compared with the amount of poverty reduction that actually took place. For example, if the 15.6-percentage-point decrease in poverty in Asia had come from everyone's income increasing by the same amount, there would have been a fall in subadjacent poverty of 5.6 percentage points, a fall in medial poverty of 6.7 percentage points, and a fall in ultra poverty of 3.2 percentage points. In reality, the subadjacent and medial poverty rates fell more than that at the expense of ultra poverty rates. The "equal-growth scenario" poverty reduction is shown as a white bar next to the actual change in each poverty rate in Figure 3.

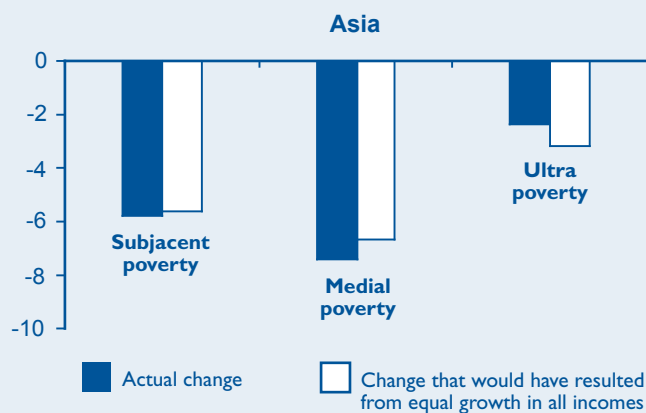
HUNGER IN ASIA

Progress in reducing hunger was examined by using the Global Hunger Index (GHI), an index designed to capture three dimensions of hunger: insufficient food availability, shortfalls in the nutritional status of children, and child mortality. Accordingly, the Index includes the following three equally weighted indicators: the proportion of people who are food-energy deficient, the prevalence of underweight in children under the age of five, and the under-five mortality rate. An Index value greater than 10 indicates a serious problem, a value greater than 20 is alarming, and one exceeding 30 is extremely alarming.

Figure 4 presents the GHI for East Asia and the Pacific, South Asia, the Middle East and North Africa, and Eastern Europe and Central Asia, and shows that South Asia is a current hot spot of hunger and undernutrition. Although South Asia made large strides in combating hunger and undernutrition in the 1990s, the region still has the highest prevalence of underweight in children in the world.

A more in-depth look at hunger was obtained from household surveys conducted in several Asian countries. As with the poor, the hungry were also disaggregated into three groups:

Figure 3—Percentage-Point Change in Poverty from Changes in Subadjacent, Medial, and Ultra Poverty, 1990–2004



Sources: Devised by authors using data from the World Bank's PovcalNet <<http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>>. Regional Gini coefficients are from T. Besley and R. Burgess, "Halving Global Poverty," *Journal of Economic Perspectives* 17, no. 3 (2003); developing world Gini coefficients are from B. Milanovic, "True World Income Distribution, 1988 and 1993: First Calculations Based on Household Surveys Alone," *Economic Journal* 122, January (2002).

- subadjacent hungry: acquiring 1,800–2,200 kilocalories (kcal) per person per day;
- medial hungry: acquiring 1,600–1,800 kcal per person per day; and
- ultra hungry: acquiring less than 1,600 kcal per person per day.

Each group is defined by progressively deeper and more life-threatening hunger associated with a deficiency of dietary energy, which is arguably the most essential nutrient for survival, physical activity, and health.

Again, South Asia is the region in Asia with the greatest hunger problems (see Figure 5). In South Asia, the overall prevalence of food-energy deficiency in the four study countries (Bangladesh, India, Pakistan, and Sri Lanka) is quite close, ranging from 51 percent in Pakistan to 61 percent in Bangladesh. Given that all of these countries had aggregate food surpluses at the time of their surveys, these high incidences are mainly due to the households' inability to access available food. However, the prevalence of ultra hunger (severe food-energy deficiency) was the highest in Timor-Leste and Sri Lanka, where conflict has probably exacerbated the hunger situation.

WHO ARE THE POOREST AND THE HUNGRY? COUNTRY CASE STUDIES

Eight Asian countries in which poverty and/or hunger are major development problems—Bangladesh, India, Laos, Pakistan, Sri Lanka, Tajikistan, Timor-Leste, and Vietnam—were examined to better understand who the poorest and hungry are. The data employed in the analysis were from nationally representative household expenditure surveys conducted in these countries. The survey years for each of the countries were: Bangladesh, 2000; India, 1999; Laos, 2002; Pakistan, 1998; Sri Lanka, 1999; Tajikistan, 2003; Timor-Leste, 2001; and Vietnam, 1998.

Rural Poverty and Remoteness

Despite a global trend toward an increase in the proportion of poor in urban areas, the incidence of rural poverty was found to be much higher than the incidence of poverty in urban areas in all of the study countries for which poverty data are available. At the dollar-a-day poverty line, the difference between the rural and urban incidences is 15 percentage points in Vietnam—the highest among the case study countries. In contrast, the differences are low in Tajikistan, Pakistan, and Sri Lanka.

The same pattern of rural disadvantage is found when looking below the dollar-a-day line, but there is a tendency toward greater rural-urban differences as poverty deepens. The poorest and most food-insecure households are located furthest from roads, markets, schools, and health services. In Laos, for example, poverty is lower in villages with roads than in those without.

To further examine the correlation between remoteness and poverty, the proportion of households with an electricity connection was considered. In addition to being an indicator of wealth, an electricity connection also indicates, to a certain extent, the “connectedness” of households to roads, markets, and communications infrastructure, and the resulting income-earning opportunities and public services. Consistently across countries, poor households have considerably lower access to electricity than those living above \$1 a day. Those living well below \$1 a day in ultra poverty are even less likely to be connected.

Spending on Food, Fuel, Housing, and Health Care

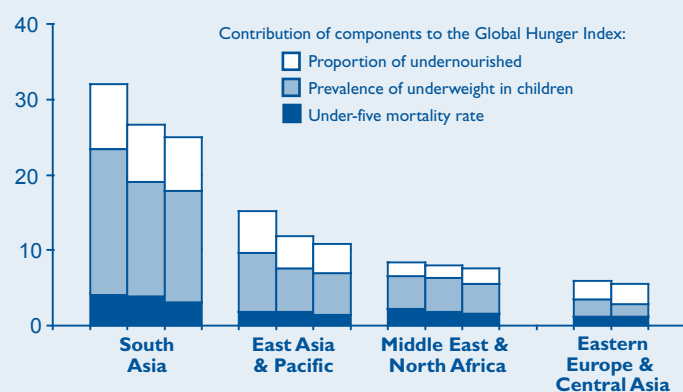
Across income groups and case-study countries, expenditures on food represent the highest share of household budgets. In general, poorer households and those in rural areas spend a relatively higher proportion of the family budget on food than do others but the differences are not large. Expenditures on fuel represent the second highest share in Bangladesh, India, and Pakistan, while housing costs represent the second highest share in Tajikistan.

No clear pattern between health-care expenditure and poverty emerges across these countries. This is a potentially worrisome finding since poverty assessments for these countries have repeatedly found that ill health is more prevalent among poor people. For example, in Bangladesh, serious illness, accidents, or death occurred in 43–48 percent of poor households compared with 29 percent of households classified as nonpoor. In Vietnam, long-term illness was repeatedly mentioned in the participatory poverty assessment as being a defining characteristic of poor families. The finding that poorer households spend no more on health suggests that the poorest spend less on health care per need than wealthier households.

Education

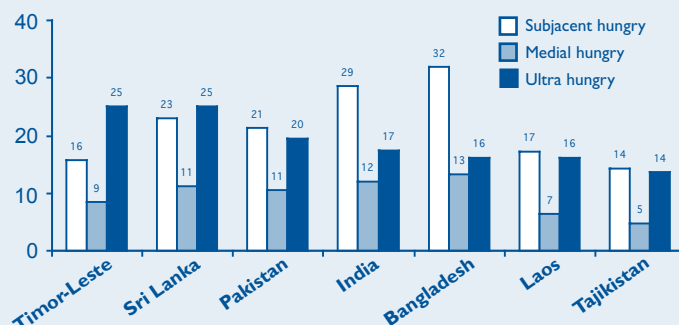
In all parts of Asia, women and men without schooling are much more likely to experience poverty. In nearly all the study countries, the proportion of adult males without schooling is almost double or more among the ultra poor than the nonpoor, and in Vietnam, adult males living in ultra poverty are three times more likely to be unschooled than those living above \$1 day. In Bangladesh, nearly

Figure 4—The Global Hunger Index, 1992, 1997, and 2003



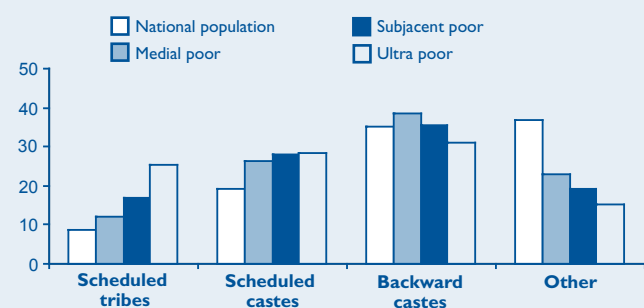
Source: Authors' presentation based on D. Wiesmann, *A Global Hunger Index: Measurement Concept, Ranking of Countries, and Trends*, Food Consumption and Nutrition Division Discussion Paper No. 212 (Washington, DC: International Food Policy Research Institute, 2006).

Figure 5—National Incidences of Hunger (Food-Energy Deficiency) for the Subadjacent, Medial, and Ultra Hungry



Source: Based on data presented in A. U. Ahmed, R. V. Hill, L. C. Smith, D. M. Wiesmann, and T. Frankenberger, *The World's Most Deprived: Characteristics and Causes of Extreme Poverty and Hunger*, 2020 Discussion Paper (Washington, DC: International Food Policy Research Institute, 2007).

Figure 6—Proportion of Scheduled Castes and Scheduled Tribes in the Indian National Population Living in Subjacent, Medial, and Ultra Poverty



Source: Authors' calculations from the National Sample Survey 55th Round Socio-Economic Survey, National Sample Survey Organization, India.

all women in ultra poor households are uneducated (92 percent) compared with less than half in households living on more than \$1 a day (49 percent). The data overwhelmingly show that the poorest are the least educated.

Quality primary education can provide children from poor families with the tools to move out of poverty. In all study countries, however, the evidence is the same: children from poorer families are less likely to go to school. In India, 48 percent of children living in ultra poverty attend school compared with 81 percent of children living on more than \$1 a day—a 33 percentage-point gap. In Vietnam, the gap is 30 percentage points. Without education, the future of children living in ultra poverty will be a distressing echo of their current experience.

Landlessness in Rural Areas

The ownership or control of productive assets is an important indicator of livelihood because assets generate income. In all parts of Asia, the poorest are landless. Rates of landlessness are higher among those living on less than \$1 a day, and the incidence of landlessness increases for those living in ultra poverty. For example, nearly 80 percent of the ultra poor in rural Bangladesh do not own land.

Excluded Groups

Individuals in groups excluded from regional progress against poverty remain among the poorest in Asia. In Laos, for example, the prevalence of poverty is more than twice as high among the minority Mon-Khmer than the majority Lao, and in Vietnam the incidence is more than six times higher among ethnic minorities than among the Kinh and Chinese. In India, disadvantaged castes and tribes (referred to as scheduled castes and tribes) are overrepresented among the ranks of the poor, particularly among those living in ultra poverty (see Figure 6).

Women

In general, large differences were not found between male- and female-headed households. However, examining only the differences between male- and female-headed households hides the reality that, within households headed by men, the welfare of women and girls may be lower than that of their male family members. While empirical evidence on this is limited, a previous study by the International Food Policy Research Institute (IFPRI) found that at the individual level, women were poorer than men in 6 of the 10 countries considered, but significantly so in only 3 of these countries. Some studies in South Asia have shown that, within households, women take in significantly less food and sometimes less high-quality food, such as meat and eggs.

CONCLUSION

The persistence of severe deprivation suggests that business as usual will take too long to improve the welfare of the world's most deprived. This finding motivates a focus on policies and programs that are particularly effective at improving the welfare of Asia's poorest and hungry.

Understanding who the poorest and hungry are is crucial for the effective design of interventions to improve their welfare. Without context-specific and timely information, it is difficult to design programs that fit their needs. It is thus important to broaden the collection of and access to accurate data on the poorest and hungry.

The evidence presented in this brief suggests that effective interventions to reach Asia's poorest should be targeted to remote households, traditionally excluded from resources and markets, and should take into account both low levels of education and landlessness. This study suggests that interventions to insure the poor against health shocks, address the exclusion of groups, prevent child malnutrition, and enable investments—particularly in education—for those with few assets are essential to helping the poorest move out of poverty. ■

For Further Reading: A. Banerjee and E. Duflo, “The Economic Lives of the Poor,” *Journal of Economic Perspectives* (forthcoming); C. Barrett, M. Carter, and P. Little, “Understanding and Reducing Persistent Poverty in Africa: Introduction to a Special Issue,” *Journal of Development Studies* 42, no. 2 (2006); J. Hoddinott, “Shocks and Their Consequences Across and Within Households in Rural Zimbabwe,” *Journal of Development Studies* 42, no. 2 (2006); J. Jalan and M. Ravallion, “Geographic Poverty Traps? A Micro Model of Consumption Growth in Rural China,” *Journal of Applied Econometrics* 17, no. 4 (2002); N. Kabeer, “Social Exclusion: Concepts, Findings and Implications for the MDGs,” *Background paper for the Social Exclusion Policy Paper* (Department for International Development, London, 2005).

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